

HIGH Q ON-CHIP INDUCTOR AND METHOD OF MANUFACTURE THEREOF

ABSTRACT OF THE DISCLOSURE

5 A high Q on-chip inductor includes a primary winding
and an auxiliary winding that is coupled to receive a
proportionally opposite representation of an input of the
primary winding. Further, the auxiliary winding has an
admittance that is greater than the admittance of the
10 primary winding thereby yielding an asymmetry in the
admittances. As such, a push/pull mechanism is obtained in
a 2-port system (e.g., 1st and 2nd nodes of the primary
winding) that produces a large Q factor for an on-chip
inductor.